

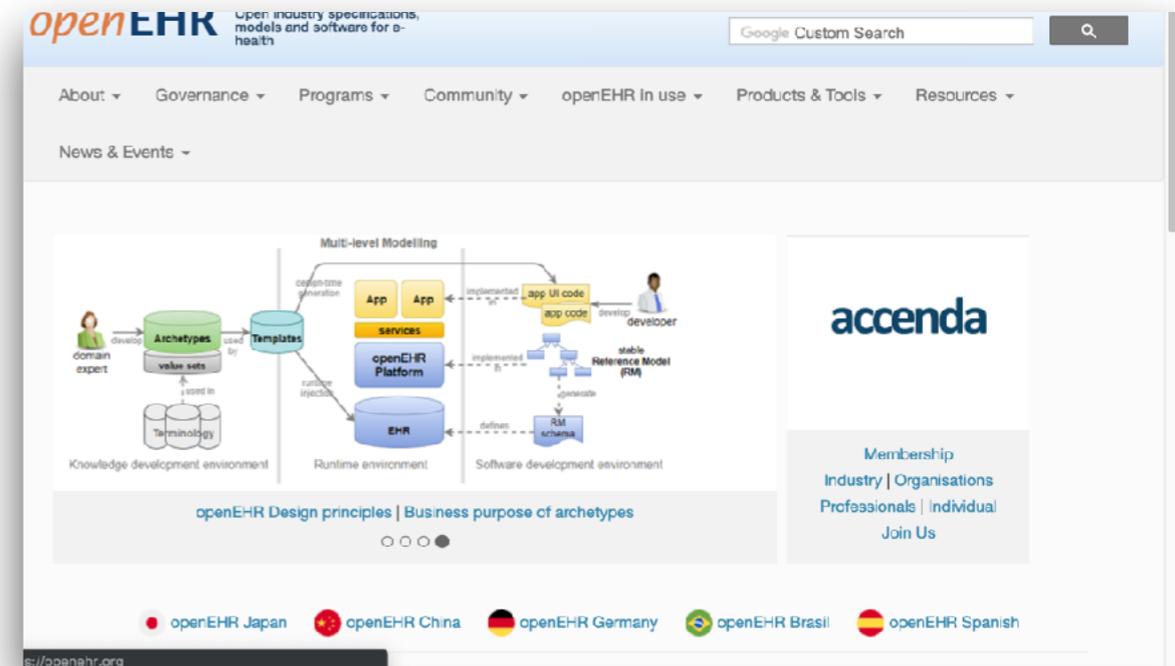
# openEHR - what is it?

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Co-chair openEHR International  
CCIO freshEHR / inidus  
INTEROPen Board member

# What is openEHR?

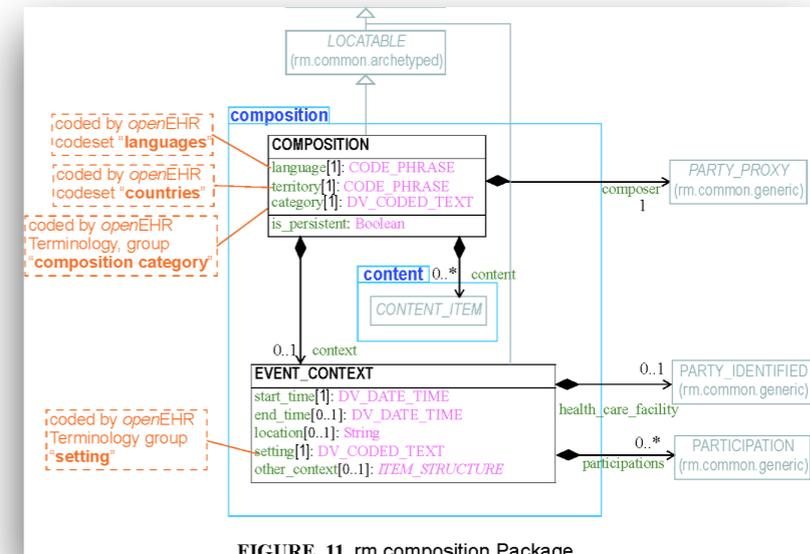
- An open specification for a health 'information model'
- capable of supporting an open platform ecosystem
  - vendor neutral
  - technology neutral
- licensed to allow open and closed source business models
- Non-Profit 'industry / clinical/ health organisation' collaborative
  - openEHR International/ openEHR Foundation



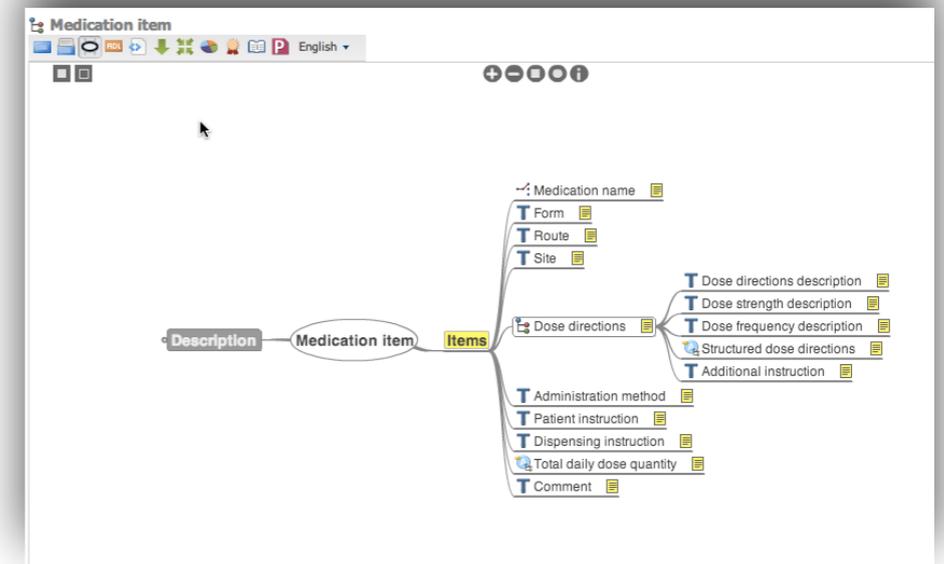
[openehr.org](http://openehr.org)

# openEHR - Specifications

- openEHR Reference model
  - how health data is represented in a patient record
  - Normal technical specifications as UML etc

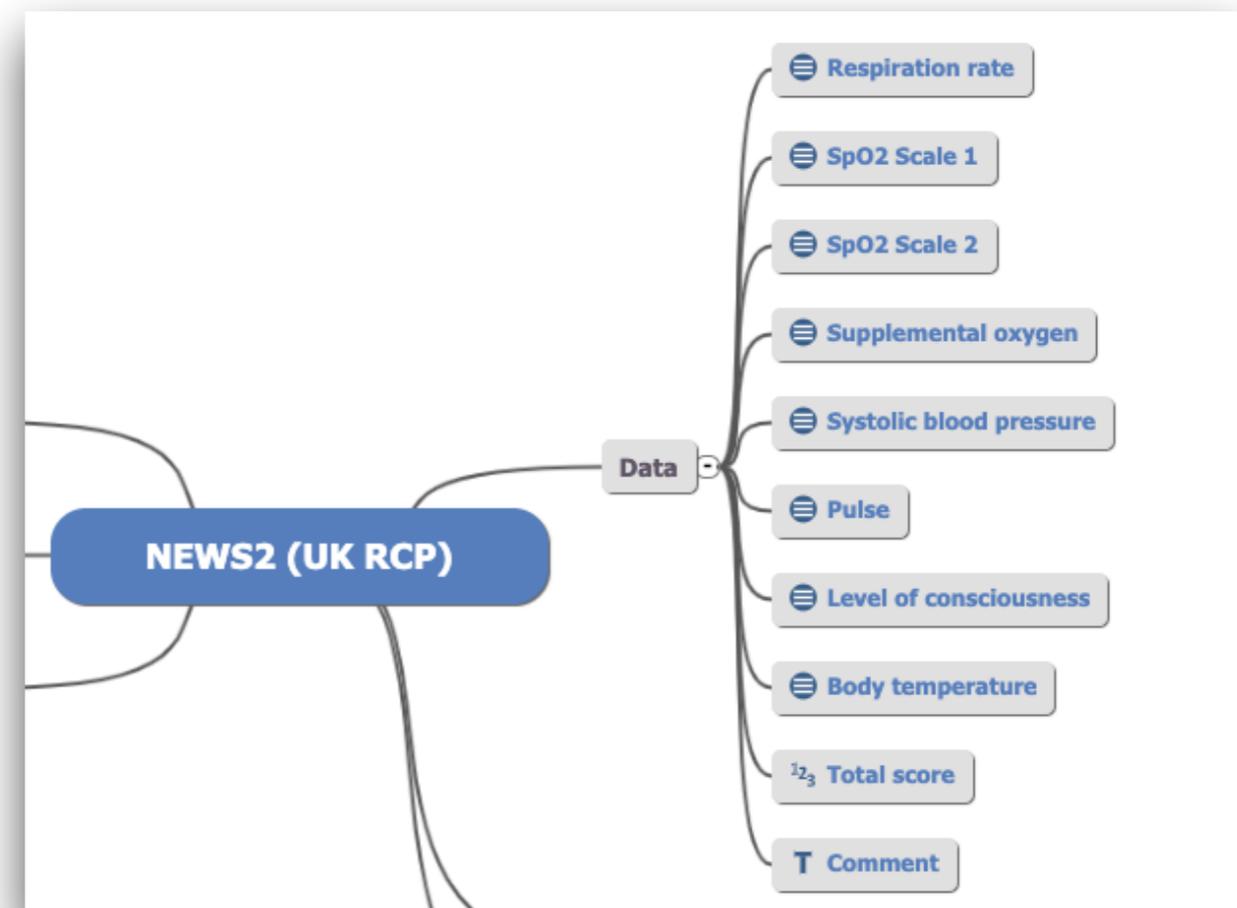


- Clinical information modelling
  - Archetypes
  - Governed independently
  - Clinically-driven



# openEHR: Archetypes

- open source computable models of discrete clinical concepts
- Familiar components of a health record
  - Blood pressure, Body weight
  - Medication order, Family history
- ‘Maximal dataset’
  - Capture as many clinical perspectives as possible
- Collaborative review by ‘CKM’ tools



# openEHR archetype/template tooling

The Archetype Designer interface shows a project named 'Lasu\_reseptikeskus' with a specific archetype 'UNA - eRA\_prescription\_reseptikeskus\_ian\_part'. The breadcrumb trail indicates the current path: 'pensation data > items > Medication management > description > Medication details > Dispensed drug > Category'. The left sidebar displays a tree view of the archetype structure, including 'items', 'Medication order', 'activities', 'Order', and 'description'. The 'description' section is expanded, showing fields like 'Drug name\_product number', 'Preparation details', 'Drug', 'Dosage form', 'Company', 'Description', 'Structured details', and 'era medication extension'. The main workspace shows the 'Definition' tab with a toolbar and a 'Constraints' panel on the right, where the 'Type' is set to 'CODED TEXT' and 'Available types' includes 'Coded Text'.

The openEHR Clinical Knowledge Manager dashboard provides a central hub for managing archetypes and templates. It features a navigation menu with options like 'Archetypes', 'Templates', 'Termsets', and 'Reviews'. The main content area includes a 'Welcome' message for the user, 'Quick Tasks' such as 'Propose new archetype' and 'View change requests', and a 'Our CKM Community in Action' section. Below these are several data tables: 'Editor's Active Review Rounds' showing review progress, 'My Active Reviews' listing reviewed resources, and 'Editor's Open Change Requests' showing pending changes.

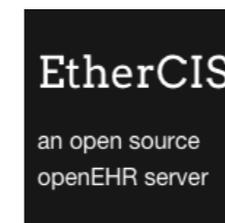
Resource	No.	Initiated	Deadline	Completed
Service direction	1	23-Oct-2019	06-Nov-2019	3/27
Revised Edmonton ...	1	23-Oct-2019	06-Nov-2019	5/71
TNM stage	1	09-Oct-2019	30-Oct-2019	5/66
pTNM stage	1	09-Oct-2019	30-Oct-2019	3/66
Genetic translocatio...	1	31-Jul-2019	16-Sep-2019	7/37
Genetic inversion va...	1	31-Jul-2019	16-Sep-2019	7/37
Genetic repeated se...	1	31-Jul-2019	16-Sep-2019	6/37

Resource	No.	Deadline
<b>Status: invited (16 Reviews)</b>		
Service direction	1	06-Nov-2019
Revised Edmonton Symptom Assessment System (ESAS-r)	1	06-Nov-2019
Genetic copy number variant	1	16-Sep-2019
Genetic duplication variant	1	16-Sep-2019
Genetic inversion variant	1	16-Sep-2019
Genetic repeated sequence variant	1	16-Sep-2019

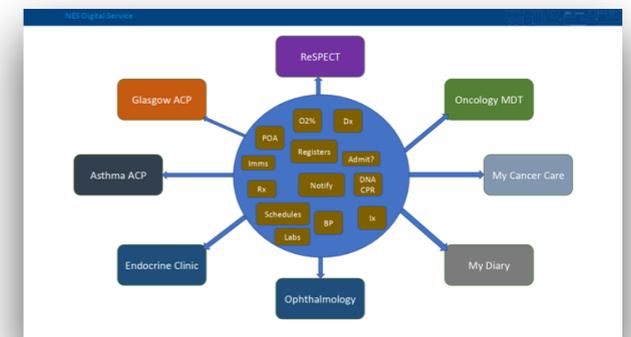
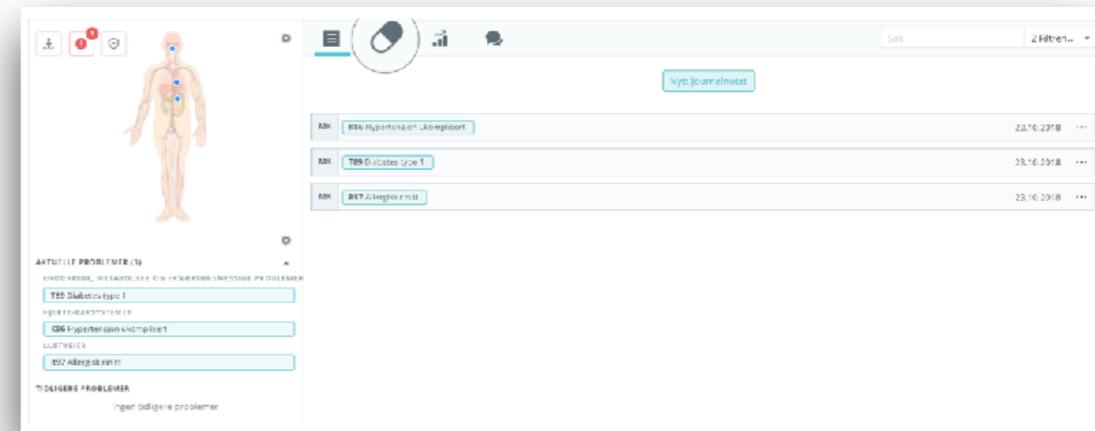
Title	Description	Date
<b>Absence of Information</b> Deprecated archetype	Project: Common resources	28-Oct-2019
<b>Absence of information</b> New archetype	Project: Common resources	28-Oct-2019

# CDR: Clinical Data Repository

- Smart datastore which natively stores, retrieves, queries openEHR data via a standard API
  - All data completely available
  - Vendor-neutral querying
  - No engineering deployment



# openEHR standard-based health and care records and applications



# openEHR International

openEHR community

openEHR

Informal community

- CKM modelling
- Mailing lists
- Discourse

openEHR International  
(community interest company)

All operational activities

'Owned' by subscribers who elect/Directors

openEHR Foundation  
(company Ltd by guarantee)

Holds any IP - Specifications Copyright Tr...

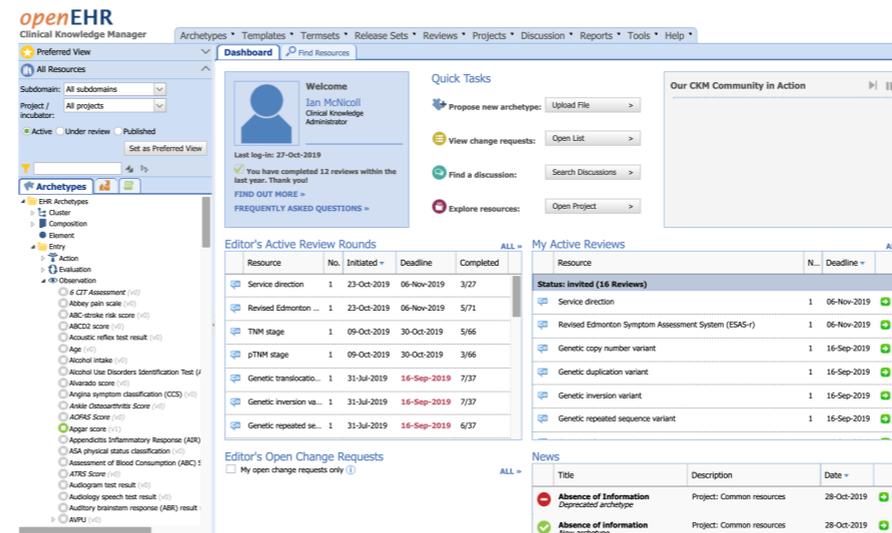
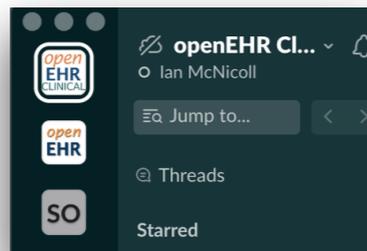
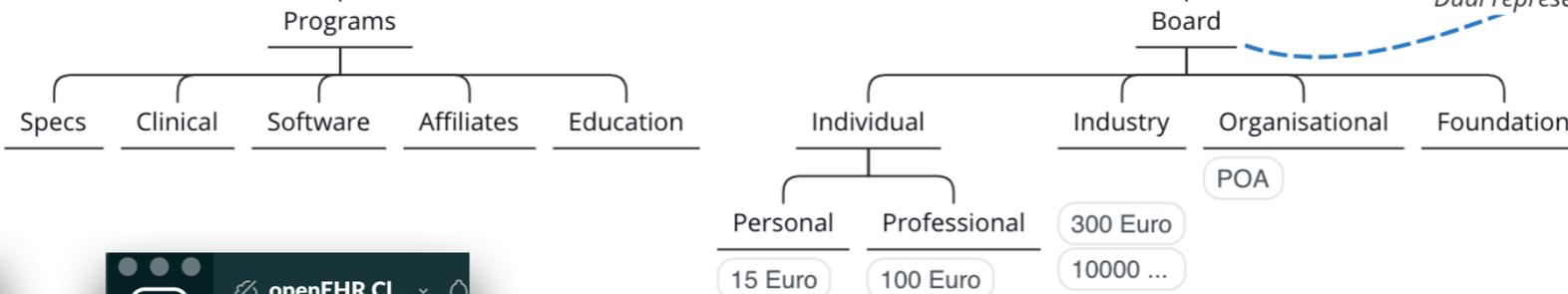
"House of Lords" role

Board

Dual representation

CIC

Core Foundation



Specifications

Specifications	Lead
Specification (SPEC)	Thomas Beale
Specification PR tracker (SPECPR)	Thomas Beale
Specifications - publication (SPEC PUB)	Thomas Beale
Specifications: Archetype model (SPECAM)	Thomas Beale
Specifications: Base (SPECBASE)	

# Foundations

## **Professor Emeritus David Ingram, PhD**

2002 -



David Ingram is Emeritus Professor of Health Informatics at UCL, President of the openEHR Foundation and a Trustee of the OpenEyes Charity. He was appointed to the first Chair in Medical Informatics in the UK, in 1989, and went on to establish the UCL Centre for Health Informatics and Multiprofessional Education, in 1995, of which he was Director until his retirement in 2011.

David led the foundational health record architecture research of the GEHR Project, within the EU, starting in 1991. From this and subsequent projects and collaborations emerged the openEHR Foundation - of which he was Founding Chair from 2002-2012 - and principal contributions of CHIME colleagues towards the CEN and ISO 13606 standards.

## **Thomas Beale**

Oct 2016 -



Thomas's academic background is in Electrical Engineering (communications) and Computer Science. His earlier professional work was in real-time distributed control (SCADA) systems for power, gas and mining; investment management and finance, and document and software configuration management systems.

After participating in the GEHR project in 1994 with Prof David Ingram's team at CHIME, UCL (UK), he worked since 1998 on EHR architectures, and participated in international standards work (OMG HDTF, HL7, CEN TC/251) for many years. He is one of the founders of the openEHR Foundation, and principal editor of [the specifications](#). He designed the archetype formalism ([ADL](#)) and object model ([AOM](#)), now an [ISO standard](#). He ran the Architecture Review Board 2005 - 2008.

He has published a number of [papers in health informatics](#) and has also presented widely on EHRs, e-Health and archetypes.

## **Sam Heard MD, FRACGP, MRCGP, FACHI**

2000 -



Sam Heard is a practicing clinician who has worked throughout his career in inner London (UK) and the Northern Territory (Australia) to assist the standardisation of health information to empower clinicians and their patients to improve health care and outcomes.

This work began with the Good European Health Record in the early 90s, continued through a long collaboration with Thomas Beale and CHIME at UCL, the establishment of Ocean Informatics as a commercial vehicle to assist in the vision and culminating in setting up the openEHR Foundation in London in 2002.

The work has continued as a Director of the openEHR Foundation, and CEO until 2012 and current board Chair of Ocean Health Systems. Sam was a foundation co-Chair of the HL7 EHR Technical Committee and has worked extensively with the UK and Australian national programs to utilise and refine the openEHR method.

# Community

